

IN THE ABSTRACT OF THE DISCLOSURE:

Please amend the abstract as follows:

ABSTRACT

A method is provided to improve the adhesion between bonding pads and ball portions of gold wires to improve the reliability of a semiconductor device. About 1 wt.% of Pd is contained in gold wires for connection between electrode pads formed on a wiring substrate and electrode pads (exposed areas of a top layer wiring formed mainly of Al) formed on a semiconductor chip. In bonded portions between the electrode and ball portions of the gold wires, an interdiffusion of Au and Al is suppressed to prevent the formation of Au₄Al after POT-PCT (Pressure Cooker Test). Thus, a desired bonding strength is obtained even when the pitch of the electrode pads is smaller than 65 pm- μ m and the diameter of the ball portion is smaller than 55 pm- μ m or the diameter of the wire portion of each gold wire is not larger than 25-pin μ m.